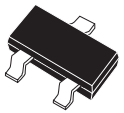
CMPT5551

NPN SILICON TRANSISTOR



SOT-23 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPT5551 type is an NPN silicon transistor manufactured bythe epitaxial planar process, epoxy molded in a surface mount package, designed for high voltage amplifier applications.
Marking Code is 1FF.

MAXIMUM RATINGS (T_A=25°C)

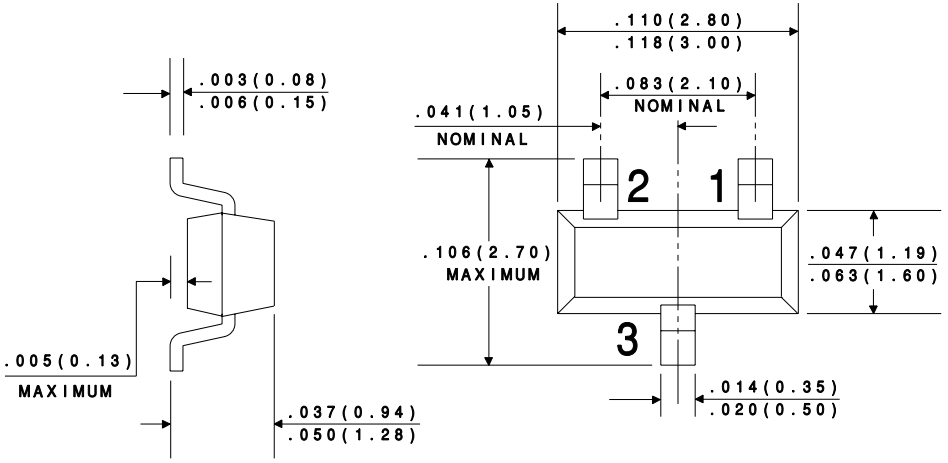
	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	180	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	600	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	V_{CB}=120V		50	nA
I_{CBO}	V_{CB}=120V, T_A=100°C		50	μA
BV_{CBO}	I_C=100μA	180		V
BV_{CEO}	I_C=1.0mA	160		V
BV_{EBO}	I_E=10μA	6.0		V
$V_{CE(SAT)}$	I_C=10mA, I_B=1.0mA		0.15	V
$V_{CE(SAT)}$	I_C=50mA, I_B=5.0mA		0.20	V
$V_{BE(SAT)}$	I_C=10mA, I_B=1.0mA		1.00	V
$V_{BE(SAT)}$	I_C=50mA, I_B=5.0mA		1.00	V
h_{FE}	V_{CE}=5.0V, I_C=1.0mA	80		
h_{FE}	V_{CE}=5.0V, IC=10mA	80	250	
h_{FE}	V_{CE}=5.0V, I_C=50mA	30		
f_T	V_{CE}=10V, I_C=10mA, f=100MHz	100	300	MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz		6.0	pF

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
h_{fe}	V_{CE}=10V, I_C=1.0mA, f=1.0kHz	50	200	
N_F	VCE=5.0V, I_C=200µA, R_S=10Ω			
	f=10Hz to 15.7kHz		8.0	dB

All dimensions in inches (mm).



LEAD CODE:

1) BASE
2) EMITTER
3) COLLECTOR

R2